Elementary Facts

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Silver Question

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SILVER QUESTION,

WITH SUGGESTIONS AS TO THEIR

PRESENT SIGNIFICANCE.

BY

JOEL F. VAILE.

C. J. KELLY
PRINTER AND BINDER
DENVER, COLO.
1893

ELEMENTARY FACTS BEARING ON THE SILVER QUESTION.

Federal Legislation.

The Constitution of the United States provides that Congress shall have power "To coin money, regulate the value thereof, and of foreign coin." (Art. I., Sec. 8, paragraph 5.) It also provides that no State shall coin money or "make anything but gold and silver coin a tender in payment of debts." (Art. I., Sec. 10, paragraph 1.)

Under the authority given by the Constitution, the act establishing the United States Mint was passed, and was approved April 2, 1792. It provides that the ratio of silver and gold shall be 15 to 1, and that any person may bring either gold or silver bullion to the mint to be coined, and that it shall be coined free of expense, and that all gold and silver coins struck at the mint shall be lawful tender in all payments whatsoever (1 U. S. Stat. at Large, p. 246).

At that time the generally accepted ratio in France and Southern Europe was 15½ to 1, and those countries had free coinage laws. As silver, therefore, was relatively more valuable in the United States than in Europe, the result of this difference of ratio was that silver came to the United States where it was worth more gold, and gold went from the United States to Europe where it was worth more silver.

June 28, 1834, the United States ratio was changed by reducing the amount of pure gold in gold coins (4 U. S. Stat., 699), and the effect of the change was to make the ratio in the United States almost, but not quite, 16 to 1, instead of 15 to 1. The effect of this change was to make silver more valuable in Europe than in the United States, as the European ratio remained at 15½ to 1; consequently silver went from the United States to Europe and gold from Europe to the United States.

January 18, 1837, the alloy in the silver dollar was changed, as also in gold coins (5 U. S. Stat., 136), which had the effect of slightly modifying the ratio, making it 15.988 in weight of silver, equal in value to one of gold. This has from that time until now remained our legal ratio, and we popularly call it 16 to 1.

The act of January 18, 1837, also provided "that gold *and silver bullion* brought to the mint for coinage shall be received and coined by the proper officers for the benefit of the depositor."

Under the influence of the ratio above mentioned, our silver was constantly exported, even subsidiary coins, which caused the passage of another act on February 21, 1853, (10 U. S. Stat., 160), which limited the legal tender quality of subsidiary coin to payments not exceeding $5 and reduced the quantity of silver in the half dollar, quarter dollar, dime and half dime, so as to make the ratio in the subsidiary coins such as to make it more profitable to leave these coins in the United States than to export them to Europe, and it had that effect, but the quantity of silver in the silver

dollar was not changed and, therefore, as to that coin the cause of exportation still continued.

No other material change in our coinage laws was made until 1873, so that the law provided for free coinage of both *silver* and gold, at the ratios above indicated, from the foundation of the Government until 1873.

February 12, 1873 (17 U. S. Stat., 424), the mintage laws of the United States were revised in such a way as to leave gold coins the only coins to which free coinage attached, except a new coin called a "trade dollar," then first created, and the legal tender quality of all silver coins, including the new trade dollar, was limited to $5, thereby demonetizing silver for the first time in the history of the country.

On July 22, 1876, free coinage was taken from the new trade dollar, and its already limited legal tender quality entirely taken away (19 U. S. Stat., 215).

On February 28, 1878 (20 U. S. Stat., 25), the Bland Act was passed, which restored the legal tender quality of the standard silver dollar, but did not restore the principle of free coinage for silver. It provided, however, for the purchase of silver bullion, at its market price, and that the silver purchased should be coined, to an amount not less than $2,000,000, nor more $4,000,000 worth of silver per month. The holders of this coin could deposit the same in the Treasury and receive silver certificates in exchange, the coin being retained for purpose of redemption of certificates. There is a large amount of currency now extant in the nature of these silver certificates, which are redeemable

only in silver, but which pass current at par with gold and with other currency of the United States. This act treated silver as a commodity to be bought at market price.

July 14, 1890, the so-called Sherman Act was passed (26 U. S. Stat., 289), which modified the Bland Act, leaving the silver dollar still a legal tender in payment of debts—which is the reason why that dollar passes current at par, exchangeable for the gold dollar—and provided for the purchase of four and one-half million ounces of silver, or so much thereof as might be offered in each month, at the market price thereof, not to exceed $1 for each 371¼ grains of pure silver. The silver so purchased was to be paid for by the issuance of treasury notes, which are redeemable in either gold or silver, at the discretion of the Secretary of the Treasury. These notes are called "coin notes" because payable in coin, and the amount of issue each month depends upon the cost at market price of the silver purchased each month. Up to the month of July, 1893, these purchases had been made to the full amount of 4,500,000 ounces per month, and the currency of the country has been increased to the extent of the commercial value of the silver so purchased, by the issuance of coin notes, increasing to that extent the paper money circulation. During the month of July, 1893, however, Secretary Carlisle purchased only 2,384,000 ounces, being 2,116,000 ounces less than the amount fixed by statute.

Most of the silver purchased under this act since July 1, 1891, has not been coined, but has been kept in the treasury of the United States

in the form of bullion, ready to be coined at any time, and held for the purpose of redeeming paper money issued in the purchase of bullion.

This is the only existing law under which the paper money circulation of the United States is increased. It is, of course, possible for new national banks to be formed, and to issue a certain amount of national bank paper, but the tendency for a long time, slightly modified in the last few months, has been to diminish and not to increase the amount of national bank circulation, and a very large part of the present paper money circulation of the country consists of the coin notes under the Sherman Act and the silver certificates issued under the Bland Act.

If the Sherman Act is repealed unconditionally without any substitute, it cuts off this method of increase of circulation, thereby restricting the amount of money available for the needs of the country.

Relative Production and Supply of Gold and Silver.

The Monetary Commission appointed by the United States Congress in 1876, made a very careful estimate of the amount of gold and silver produced in the world. (*See Appendix, Notes 1 and 3.*) The reports of the Director of the United States Mint give reports by years for the world's production from 1873 to date. (*See report of Director of Mint on production of gold and silver, 1892, p. 57.*)

From these the following facts are derived: That in 1872 the world's supply of *gold*, produced since 1492, was 5,453 million dollars; the supply of

silver, 6,751 million dollars. In other words, of the total of the two metals produced during that period of 380 years, 44.68 per cent was gold, and 55.32 per cent was silver. At the end of 1892 the total world's supply of gold, counted from the same date, had increased to 7,610 millions, the total supply of silver had increased to 9,097 millions, or in other words—at this time—of the total of both metals produced in 400 years, the gold composes 45.55 per cent and the silver 54.45 per cent.

These figures show that notwithstanding the great production of silver of recent years, yet the percentage of increase of the gold supply is greater than the percentage of increase in the silver supply during the last twenty years. This percentage of increase is readily found. The world's product of gold, accumulated between 1492 and 1872, has increased 39.55 per cent since the last named year; the world's supply of silver, under the same comparison, has increased 34.77 per cent.

It is true that since the year 1881, counting silver at the coinage value of $1.29 per ounce (as it is computed in all statements in this paper), the *annual* output of silver has exceeded the annual output of gold; but when compared with the world's product since the discovery of America, the relative increase is as above mentioned.

The Effect of Relative Production of Metals on the Price of Silver.

Statistics are available to show the value of silver as measured in gold for more than 200 years, (*see Report Director U. S. Mint, 1892, p. 217*); and these show the following facts: From

the year 1687 to the year 1872, inclusive, the highest ratio was 14.14 ounces of silver to one ounce of gold, and the lowest ratio was 16.25 ounces of silver to one ounce of gold and for 125 years out of the 186 years above mentioned, the ratio stood between 15 and 16. After 1872 and down to the present date, the yearly average has shown a marked descent with a slight temporary increase in 1890, and the lowest yearly average ratio in the last twenty years was in 1892, when it stood at 23.72 ounces of silver to one ounce of gold.

It should be borne in mind that the ratio of 16 to 1 means a price of about $1.29 per ounce for silver, the price being measured in gold. The present price is about 70 cents per ounce, which means that it would now require 29½ ounces of silver bullion to buy one ounce of gold bullion.

It is urged by gold monometallists that the decline in the relative value of silver during the past twenty years is due to the great increase in the *annual* production of silver during that time. (*See Appendix, Note 2.*)

It is evident to every one that in comparing the relative supply from time to time of articles not consumed in the using, the comparison must be made on the basis of the total existing stock. Each year's supply is a mere increment added to the vast supply already accumulated. No comparison, then, for a single year or for a few years is of any value. A comparison based on the total output of several hundred years is of great value, because it approximates and fairly represents the relative supply of the two metals in the total

existing stock. But such comparison, as shown by statistics already used, demonstrates that the world's stock of gold has increased in greater proportion since 1872 than has the stock of silver. (*See Appendix, Note 3.*) The conclusion is inevitable that the change in the relative value of the two metals is not due to any recent disparity of production.

While this is true, as shown by the facts already mentioned, yet there are other very pertinent facts that bear upon the question, as will be shown by the following comparison of gold and silver product for the twenty years preceding the demonetization act of 1873 and the twenty years following the enactment of that statute:

The world's product of gold from 1853 to 1872—twenty years—was	2,383.9	million	dollars.
The world's product of silver (Am. coinage value) from 1853 to 1872 was	942.1	"	"
The gold excess of production during this period	1,441.8	"	"

During this period, however, the relative value of gold and silver changed very slightly, the maximum gold price of silver being \$1.36 per ounce, and the minimum gold price of silver $\$1.32\frac{8}{10}$ per ounce, making the widest variance only $3\frac{8}{10}$ cents per ounce. In the next twenty years, however, we have the following remarkable condition:

1873 to 1892, silver product	2,347	millions of	dollars.
1873 to 1892, gold "	2,157	"	"
Excess of silver	190	"	"

But during this period the maximum yearly average price of silver was \$1.29$\frac{8}{10}$ per ounce, and the minimum yearly average was 87$\frac{5}{10}$ cents per ounce, making a variance of 42$\frac{3}{10}$ cents per ounce.

If relative production is the cause, and sole cause of changes in price, we find this remarkable anomaly, that the excess of gold product in twenty years, of 1,441 million dollars, made a difference in relative value of only 3$\frac{8}{10}$ cents per ounce for silver, but that in the next twenty years an excess of only 190 millions in silver product made a difference of 42$\frac{3}{10}$ cents per ounce in price; in other words, by comparing the two periods, that less than one-seventh of the cause produced more than eleven times the effect.

It is very clear that some other cause than relative production has operated in changing the price of silver. The true cause is readily found in the changes which have been made in coinage laws.

Effect of Stopping Free Coinage.

Every country which uses gold and has a mint, has a provision for free coinage of *gold*. Mexico, and, until the last month, India, have had free coinage of silver. England had free coinage of silver until 1816. France and various countries of Europe, had free coinage of both metals until 1873, as did also the United States. Under the policy of free coinage the amount of coin circulation is regulated, as it were, automatically. If it is more profitable to have the metal in the form of coin it goes to the mint and is converted into coin; if it is more profitable to have it in some other form, the coin itself

will be melted up, and, therefore, an elastic coin currency is furnished, regulated by the demands of trade. If, as to either metal, however, this privilege is taken away, then at once the particular metal which no longer possesses the right of free coinage becomes a mere commodity, because it can not be freely changed into coin, or coin of the same metal freely changed into bullion; and if, in addition to this, restrictions are made upon its debt-paying power, then its value is still further reduced.

Let it be admitted that demand controls price, yet for the precious metals, gold and silver, money uses constitute the principal demand and, therefore, chiefly determine value.

According to an estimate furnished by the Director of the United States Mint, in May, 1892, of the total amount of gold and the total amount of silver coin, of different nations in the world, and comparing that estimate with the total product of the metals since the year 1492, according to the statistics already used, it is found that 49.7 per cent of the world's gold product for that period still existed in the form of gold coin, and that 45.3 per cent of the world's silver, produced during the same period, remained in the form of silver coin.

This shows that one-half of all the gold and nearly one-half of all the silver produced since the discovery of America, now exist in the form of circulating money. So great a demand must be a controlling factor in fixing value. Its extent is such that relative values, as fixed by monetary statutes, under free coinage of both metals, must control relative *commercial* value.

This at once explains why, in the twenty years from 1853 to 1872, inclusive, the remarkable disparity in the production of the two metals had very slight effect on the price of silver, and that during the succeeding twenty years that variance was so great.

During the first of these two periods, free coinage laws were in operation in France and other countries of Europe, and also in the United States, and silver and gold alike could be taken to the mints of those countries and freely changed into coin, and the operation of the great money demand for the precious metals kept the commercial ratio practically coincident with the statutory ratio.

Since 1873, this privilege of free coinage has continued as to gold, but has ceased as to silver, in many of the countries of the world, including those above mentioned, which has the effect of making the great monetary demand for silver depend, not upon the free operation of supply and demand, but upon the arbitrary action of governments.

A very striking example of the effect of the change of policy, even in one country, is illustrated by recent events. Free coinage was in existence in Mexico and India, and silver bullion could, at the demand of any person presenting it, be changed by the mints of those countries into coin of those countries. The United States was also a purchaser of silver to the extent of four and one-half million ounces per month. Notwithstanding the demonetization of silver in Germany and the restriction upon free coinage in France and other countries of Europe and in the United States, yet the existence of free coinage in India

and Mexico and the purchase of silver in the United States kept silver at a price above 82 cents per ounce. It was the money uses for silver in these countries that kept it even at so high a price as that. But, the last of June, the government of India, apprehending that the United States would soon stop the purchase of silver, and thereby diminish its value, to the detriment of India, thought to anticipate such action by changing the monetary policy of India itself. They, therefore, changed the policy of India by suddenly withdrawing the right of free coinage, and within forty-eight hours after the announcement of that change in the British Parliament the price of silver fell from about 82 cents to 68 cents per ounce. This is a striking illustration of the effect our own change of policy has had, the difference being that when we changed our policy in the United States, to wit, in 1873, we were using paper money alone, being soon after the war. No silver or gold was in circulation, and the effect of the law was, therefore, not immediately appreciated, and the effect of this action in the United States was to bring about gradually a result similar to that which, by the action of India, has been precipitated with the greatest suddenness.

Silver Purchasing Acts.

As already stated, the present Sherman Act passed in 1890, and its predecessor, the Bland Act passed in 1878, provide for the purchase of silver by the government and the payment therefor, under the Sherman Act, by treasury notes, and under the Bland Act in any form of lawful money, but with a

provision for the deposit of the coined silver and the issuance of silver certificates, the silver remaining in the treasury for purposes of redemption, and the paper so issued circulating as currency among the people.

These purchasing acts have never been demanded or even favored by the advocates of bimetallism. In the nature of things they cannot express a permanent policy. They have been temporary expedients forced upon the advocates of bimetallism by those who are opposed to the free coinage of silver. For example, the Bland Act, when introduced by Mr. Bland, provided for the free coinage of silver and a restoration of the standard silver dollar to the position it occupied prior to 1873. By an amendment offered by Senator Allison, the free coinage principle was eliminated from the bill and the purchase of silver substituted in its stead, and Congress finally compromised upon this arrangement as the only method on which they could agree for even an increased use of silver. When the Sherman Act was passed it was also a compromise measure, and the very name it bears in popular parlance shows that it was not a bill favored by bimetallists.

The advocates of bimetallism do not ask the government to purchase any silver whatever, nor to purchase any gold whatever, but ask that the mintage laws shall be so changed that not only may gold bullion, as now, be changed into gold coin, but that also silver bullion may be changed into silver coin freely, according to the necessities of commerce and demands for sound money.

Let it be conceded that prices of any article which is the subject of barter are determined by relative supply and demand, yet it must be true that anything which increases demand relatively will increase price; by making gold the only standard of value and the only metal which can be freely minted, the demand for it increases and its value appreciates. By giving the same privilege to silver, the demand for the latter increases and its value appreciates, and, as a necessary consequence, the relative value of gold depreciates as the relative demand for it becomes less. We can carry the illustration further. If the countries which demonetized silver should reverse the process—demonetize gold and take away from it the right of free coinage, and give the right of free coinage to silver and make it legal tender, then present conditions would be reversed and gold would become the "fifty cent dollar" and silver the dollar at par.

The statement that silver men want the government to pay a dollar for what is actually worth only 70 cents, or less, entirely misstates the situation, and it can with equal truth be said that the monometallists want the government to pay $1.50 for the gold which is actually worth only $1.

The advocates of bimetallism simply wish a restoration of the policy which existed in all the commercial world prior to 1816, and in all the commercial world except England, until 1873, the abandonment of which has brought about most serious disaster which seems likely to increase until a change of policy is resorted to.

Would Free Coinage of Silver Relieve the Difficulty?

It has been urged as against the value of a return to free coinage of silver, that during the whole history of the United States Mint from 1792 to 1873, less than eight millions of standard silver dollars were coined under the operation of free coinage laws. This statement is a sort of a half truth which constitutes a falsehood. Silver coins of the denomination of $1 were not coined in the United States Mint, except the amount of about $7,700,000, prior to 1873, but the total silver coinage, including subsidiary coins, during that period was more than one hundred and forty-three millions. And, in this connection it may be borne in mind that prior to the year 1847 when the great gold discoveries of the world commenced to make a sudden and vast increase in the product of that metal, the relative gold and silver coinage of the United States Mint showed silver the favorite; the gold coinage up to 1847 being $52,360,792, and the silver coinage for the same period being $69,072,497.

But a very plain reason appears why there was not more silver coined at the mint prior to 1873 in this fact, that various foreign silver coins were by law made legal tender in the United States until the year 1857. The Spanish milled dollar was a legal tender, at 100 cents, from the foundation of the government until February 21, 1857, and came to this country in vast quantities, and as the amount of pure silver contained in it closely approximated the amount of pure silver in the American standard dollar, there was no advantage

in putting it into the mint to be recoined and stamped, as that, under the existing laws, would not add to its value as money; so, for a large part of this period, the French crown and five franc piece were legal tender in the United States, and for many years the dollars of Mexico, Peru, Chili and Central America were legal tender in the United States at one hundred cents, and these coins circulated in large quantities in this country. Under these circumstances, the statistics of the United States Mint prior to 1873 furnish practically no argument whatever upon the question, further than that the existence of the free coinage principle at a ratio fixed by law, determining the relative value of silver and gold, left perfect freedom of interchange; and as the foreign coins above referred to were a legal tender, the combined effect of the laws was to have the mints of certain foreign countries coin our silver money for us instead of coining it ourselves.

This quality of legal tender for certain foreign silver coins was not changed until 1857, and even then as to the fractional parts of the Spanish silver dollar the law permitted their exchange at the United States Mint at their par value until February 21, 1861. This brings us down to the time of the war when specie payments were generally suspended and we came into an era of paper money.

The French ratio of silver and gold is 15½ to 1, which gives a greater value to silver than the American ratio, and France, from at least the time of the Revolution down to 1873, had free coinage of silver equally with gold, and silver was a full

legal tender, and for the latter part of that period various states of Southern Europe, which, with France, formed what was called the "Latin Union," had a similar policy. From 1816, however, England was on a gold basis alone, and yet the existence of free coinage in France was sufficient to maintain the parity of the two metals at the legal ratio, notwithstanding the fluctuation in the relative supply of the two metals was seven times greater than any fluctuation that has occurred since 1873.

It is also apparent that the slight fluctuations which did exist in the price of silver during that period would have been almost entirely avoided if the different countries, having free coinage of silver, had had the same ratio. The difference of ratio between the United States and France was sufficient in itself to make slight fluctuations in the price of silver.

As already argued, the money demand for both precious metals absorbs so large a portion of the entire product that that demand will, under laws which permit its free exercise, necessarily determine value; and if, therefore, the great commercial countries of the world, using both gold and silver, should agree upon a uniform ratio, with free coinage, the element which has heretofore caused fluctuations in the relative values of silver and gold, would disappear and the steadiness of the vast demand for both metals for money uses would maintain any ratio so agreed upon. This would constitute international bimetallism, and an increasing number of distinguished statesmen and economists agree that this is the ideal end to be attained.

There are, however, two great divisions in the world according to self interest: The creditor class, so far as it is permanently so, and those who have fixed incomes which will remain fixed and permanent, are personally interested in a restriction of the amount of the circulating medium, as such restriction increases the purchasing power of their income. The debtor class, or those who have to pay, are, on the other hand, interested in the expansion of the circulating medium, as the same amount of money in which debts are to be paid will be obtained by a less amount of effort or a less amount of produce. But there is a class not necessarily included in either, or which may be in both of the above classes, which constitutes the majority of those interested in the question. This class is composed of the great commercial and producing element of population. It is a fact, demonstrated by history and which could be easily elaborated and illustrated, that commerce and manufactures thrive best with an increasing volume of money or a volume that at least keeps pace with the growth of commerce, and that these interests are depressed and hard times ensue when the volume of money is diminished. So rapid is the growth of population, and so great the increase in civilization, that the demands for an increased volume of currency grow with rapidity, and the combined product of both gold and silver has not, under the laws in vogue in the last twenty years, been sufficient to keep pace with these demands of business. This is, in a measure, illustrated by the fact that although the world's supply of gold has increased 39.55 per cent and the world's supply of silver has

increased 34.77 per cent since 1872, yet the general average of all prices has fallen in these twenty years more than 30 per cent, which means that relatively the metallic basis of money circulation has appreciated in value more than 30 per cent in twenty years, and it is a remarkable fact that when gold and silver separately are compared with the general average of all prices this appreciation seems to be in gold alone. In other words, the relative value of silver compared with the average prices of all the great staples, has fluctuated but slightly, while the value of gold in reference to all these prices has increased upwards of 30 per cent. This has the manifest effect in those countries, which, by reason of the operation of coinage laws, are practically on the gold basis, of causing all the evil effects resulting from a contraction of the circulating medium. That is the case to-day in the United States and in England, and, to some extent, in other countries using gold and maintaining their currency at a parity with gold. On the other hand, in silver-using countries such as Mexico and India, there has been no such decline in relative prices of domestic products and of wages. Nevertheless, those countries have been very seriously crippled, from the fact that they owe immense indebtedness in gold-using countries, which has to be paid in gold or its equivalent, and, therefore, taxes have to be raised to almost double the amount for the purpose of paying the interest and principal of such debts, as compared with what would be paid if the two metals stood at the old parity. India has suffered incredibly by this condition, and Mexico is now "in the toils" by reason of the same conditions.

Will Independent Free Coinage by the United States be the Best Course to Pursue?

International bimetallism can only be reached by agreement of nations, and while various efforts have been made looking to that end, they have so far been unsuccessful, England being the principal obstacle. The question then comes as to whether the United States should return to free coinage without awaiting the action of other countries?

The present "banker's panic," and the recent action of the Indian government by which the disparity between gold and silver was so greatly increased, seem to leave but two alternatives for the United States:

First—To repeal the Sherman act, making no substitute therefor, which would be to go at once to the gold standard and become monometallic; in other words, to adopt the attitude practically of England.

Second—To adopt the principle of free coinage for silver at a ratio to be fixed by law and take the consequences whatever they may be.

The policy to be followed must be determined by probable consequences. These must be estimated in the light of past experience and present conditions.

A familiar principle is thus stated by Professor Nicholson: "The measure of values or the general level of prices throughout the world will be so adjusted that the *metals used as currency*, or as the *basis* of substitutes for currency, will be just sufficient for the purpose." (*Money and Monetary Problems*, p. 101.)

If the volume of the metallic basis of money circulation is reduced in its relation to the necessities of commerce, values, prices and wages will be correspondingly reduced.

It may also be said that if a large part of the world, having been using the combined volume of both the precious metals as the basis of money circulation, changes monetary policies so as to confine this basis of circulation to the volume of one metal alone, this will result in a great contraction of all values. This has been the character of recent changes of monetary policy, and certain countries which in former years had the combined mass of both metals as the basis of circulation now have gold alone.

It will also be apparent that if countries heretofore using inconvertible paper money or using silver as the basis for circulation, should also adopt gold as the single metal for that purpose, this contraction of values would be vastly increased.

The increasing monetary demand for gold in very recent years is illustrated by the increase of gold coinage of the world as compared with its gold product. There is no necessary relation between annual product of gold and annual coinage of gold, as the latter includes recoinages and coinage of old material. But a radical increase of coinage as compared with the world's product necessarily marks an increase in the monetary demand for the metal. Such increase of coinage is shown by recent statistics. (*See Appendix*, note 5.)

There are other facts showing the growth and the force of this money demand for gold. Austria-

Hungary had, until August 2d, 1892, been nominally on the silver basis, but, in fact, her currency consisted of paper money. On the date named, she reorganized her monetary system on a gold basis. The following table is full of significance:

AUSTRO-HUNGARIAN BANK.

		Pounds Sterling.	
July 16, 1892,	Gold Assets,	5,988,000	cf Economist, July 22, 1893, p. 885.
July 14, 1893,	" "	10,530,000	cf Economist, July 22, 1893, p. 885.
Increase in	one year.....	4,542,000	= 75 per cent.

But this bank statement does not measure this new demand. The Austrian correspondent of the London *Economist*, in the issue of that paper dated July 29, 1893, says: "The establishment of a pure gold standard has been settled by law and 320 millions florins [$154,000,000] gold have been amassed for the purpose in a very short time."

Russia is nominally on the silver basis, but has in fact been on a paper basis for many years.

Her government is reaching out now for a share in the world's gold. The last issue of the London *Economist* contained the statement in relation to Russia that the reserves of gold at the disposal of the government have enormously increased of late years, and now exceed in value a total of ninety millions sterling (about $437,000,000). The Director of the U. S. Mint last year estimated the amount of gold then in Russia at $190,000,000 only.

This increased and still growing demand has already produced its effects in the United States,

and is manifestly a large factor—and probably the principal factor—in precipitating the present financial crisis.

The evils of a contracted currency are already upon us, and yet it is now proposed to still further increase the demand for gold without any known possible way of making a corresponding increase in its supply,* by putting the United States definitely on a gold basis, and by stopping even the present increase of silver circulation.

This would so increase the money demand for gold that a much greater decline in all values, prices and wages must inevitably follow. But more than this: if the United States should accept the single gold standard, this would compel India to pursue the same action as its definite and permanent policy, as is clearly shown by its tentative action in the present summer. The financial member of the Indian government, Sir David Barbour, estimates that it would require about £15,000,000 (nearly $75,000,000) to maintain the gold standard in that country, and would require annual additions to this initiatory sum—another vast force pressing to obtain gold.

Mr. John Henry Norman, in his *Metal Monetary Systems,* issued in 1892, advises us that, of the fifteen gold monetary systems in the world, six are now *inoperative*, gold being displaced by paper currency. The evils of an inconvertible paper currency are notorious, and there must always be

*Silver ores frequently contain gold in considerable quantity. A large percentage of the present gold supply comes from silver mines which cannot be profitably worked for either metal alone, nor even for the combined product at a low price for silver. Any monetary policy which has the effect of closing silver mines will greatly *diminish* the current supply of gold.

a pressure in these countries for a return to specie payments, increasing the demand for gold.*

But we do not need to follow the certain consequences so far as this to see that the immediate future demand for gold, added to the present excessive demand, would rapidly reduce all values, multiply the burdens of debtors, restrict commercial and industrial enterprise and result in bankruptcies innumerable.

The funded debts of the railroads of the United States amount to 5463.6 millions of dollars (*Poor's Manual*, 1893 p. i)—a sum, by the way, exceeding the total amount of gold coin in the world by more than 1,700 millions of dollars. The interest charge on this debt, at 4 per cent, would amount to 218½ millions of dollars annually. However much the value of the gold dollar may appreciate, and all other values decline, the number of dollars to be paid, principal and interest, will remain the same; but reduced values and prices and the depression of trade must make less traffic, lower rates and reduced earnings. Moreover, many of these and other large mortgage debts are made payable, principal and interest, in "gold coin of the present standard of weight and fineness," preventing any relief from laws making paper, silver or anything else "legal tender." The full effect of the enhanced value of gold will fall upon these enterprises, and railroads furnish but an illustration of vast interests similarly affected.

In the event of the certain appreciation of

* In the *Economist* of July 29, 1893, Mr. Evelyn Hubbard calls attention to the fact that the Russian paper rouble (now inconvertible except at a high premium) bears a *promise* to pay "either gold or silver money on demand," and he says that it is the opinion of the best Russian financial authorities that the redemption of the rouble, whenever the time for that operation may arrive, must be in gold and gold only.

gold, resulting from the proposed action, what would save us from universal bankruptcy?

While large corporations and the stockholders of large corporations would be great sufferers under the proposed policy, yet their suffering is not for a moment to be compared with the universal distress that would affect farmers, whose property is mortgaged, and the immense number of small debtors, whose obligations will become due three, five and ten years hence. It is among the great numbers which constitute this class that intense distress must prevail.

The writer is not to be understood as contending for any policy which is intended to reduce the burden of debtors at the expense of creditors. The ideal monetary policy would be such as to preserve absolute equality in the amount of sacrifice required to satisfy the same sum at the maturity as at the inception of the debt. The policy under discussion would involve the most violent disturbance of such equality ever known in financial history. If, on the other hand, the combined volume of both the precious metals can furnish continuously the measure of value, there is every reason to believe that as near an approximation to the equality above mentioned will be reached as the varying conditions of the world's production and commerce will permit.

It is a well recognized fact that from the year 1873 down to about the year 1888 prices and values, on the average, as measured in gold, had depreciated about thirty per cent. Since that time there has been a still further depreciation, and it is probable that thirty-five per cent would

more nearly represent the present depreciation of prices from the standard of 1872, not in the United States alone, but in all gold-using countries.

Using the statistics already referred to, of the world's product of gold and silver since the discovery of America, and taking that product up to the year 1872 as the basis for comparison, and as fairly representing, at that time, the existing stock of gold and silver in the world, we find, if we take the estimate of the Monetary Commission, that the combined mass of the two metals has, in the past twenty years, increased 36.8 per cent, and if we take Soetbeer's tables we shall find that the combined mass of the two metals has increased 31½ per cent. Prior to 1873, however, in the present gold-using countries, the combined mass of the two metals did practically furnish the measure of values. Since 1873, the metallic volume, which must measure values, has been greatly narrowed, and it is sought to bring it wholly within the gold mass alone. Is it not remarkable that the increase in the value of the combined mass of the two metals corresponds in ratio so closely with the well-known fall in prices? The inference is well justified that, if the combined mass of the two metals had still continued during the past twenty years as the basis for the measurement of values, prices and values would have maintained their level, and that debts could be paid at maturity with as little sacrifice as at the date of their origin.

If, however, we should pursue the second alternative above mentioned, to wit, adopt free coinage of silver, we are told by monometallists that it would bring us at once to a silver basis

alone, that our gold would be driven away, and that silver would be the only actual standard of value. Even if this consequence should ensue, it would bring about less hardship to the masses of the people and to the great commercial and industrial interests of the country, than the other process.

But it can be said with almost absolute certainty, that such results would not follow.

At the recent monetary conference at Brussels, Sir Guilford L. Molesworth, a delegate of British India, said:

"It has been said that the enormous flood of silver in 1873 forced France to close her mints to silver, but this is not the case. The flood of gold in 1859 was four and one-half times as great as the flood of silver in 1873, and yet France, single-handed, kept her mint open to gold and saved the ratio. It was not the flood of silver that wrecked the double standard. It was timidity and false political economy. * * * With such remarkable experience to guide us, it appears probable that the United States of America, if they had the courage to make the plunge, might keep the equilibrium single-handed. At all events, a combination with the Latin Union would place the matter beyond a doubt."

If the United States should now adopt bimetallism at a fixed statutory ratio as its definite policy, it is almost certain that the government of India would return to the free coinage of silver. Its recent action was precipitated by the fear that the United States would repeal the Sherman law and make no provision for the free coinage of silver. This is shown by the entire correspondence with the home government. Sir David Barbour, in his "Minute," which was the basis of final action, says:

"I have no hesitation in saying, that an international

agreement for the free coinage of both silver and gold, and for the making of them full legal tender, at a fixed ratio, would be far better for India, and *all other countries*, than the establishment of the single gold standard, even if the latter course be possible."

At the close of his "Minute," he says:

"If a general agreement for the free coinage of both silver and gold at a fixed ratio cannot be obtained, and *if the United States does not adopt free coinage of silver*, I think an attempt should be made to establish a gold standard in this country."

There are various facts which furnish strong reason for saying that the United States would not, as has been often urged, become the "dumping ground" of the world's silver, in the event of its independent adoption of free coinage.

There is very little silver in the world that is not either already used in the arts, or incorporated into the coinage of the various countries. Mr. David A. Wells has quoted from the London *Economist* this statement:

"The quantity of pure silver used for coinage purposes during the fourteen years ending in 1884, was about eighteen per cent greater than the total production during that period."

* * * * * * *

"The evidence of statistics goes to show that the coinage demand for the metal is and has been sufficient to absorb the whole of the annual supply that is left over after the consumption in the arts and manufactures has been supplied, and this conclusion is supported by the fact that nowhere throughout the world has there been any accumulation of uncoined stocks of the metal."

The same is doubtless true at this day, if we except the large amount of bullion in the United States Treasury, which, for the purposes of our argument, may be considered as coin, being represented as it is by coin certificates. It is very ap-

parent, however, that the United States will not, under any existing policy of foreign governments, receive any considerable supply of silver coin from other countries, even though we adopt the free coinage principle at our present ratio. The countries of the Latin Union, for example, have upwards of eight hundred millions of dollars in silver coin, which is a legal tender at a ratio with gold of 15½ to 1.

Silver to the additional amount of 245 million dollars is held as coin in Germany and Great Britain, and there used as money at even a higher valuation than in France and her associates of the Latin Union.

Manifestly, none of this 1,045 millions of dollars in silver would come to us to be re-coined at our ratio of 16 to 1, as this would entail great loss.

The silver-using countries, such as China, India and the Straits Settlements are, for the most part, importers of silver rather than exporters. Moreover, the States of South America have very largely been using paper money, and greatly depreciated paper at that; and some of them, as, for example, Peru, are attempting to return to a silver basis, thereby increasing the demand in these countries for the silver product.

In connection with these facts, I desire to quote from Mr. David A. Wells, who, at the close of his book entitled "Recent Economic Changes," in which he has presented a very strong and persuasive argument in favor of the single gold standard, nevertheless makes these remarks:

"Something of inference respecting the economic changes of the future may be warranted from a study of the past. It may, for example, be anticipated that whatever of economic

disturbance has been due to a change in the relative value of silver to gold, will ultimately be terminated by a restoration of the bullion price of the former metal to the rates (sixty to sixty-one pence per ounce) that prevailed for many years prior to the year 1873. The reasons which warrant such an opinion are, briefly, as follows: Silver is the only suitable coin medium for countries of comparatively low prices, low wages and limited exchanges, like India, China, Central and South America, which represent about three-fifths of the population of the world, or about a thousand millions of people. Civilization in most of these countries, through the advent of better means of production and exchange, is rapidly advancing, necessitating a continually increasing demand for silver as money, as well as of iron for tools and machinery. Generations also will pass before the people of such countries will begin to economize money by the use, to any extent, of its representatives—paper and credit. Under such circumstances, a scarcity rather than a superabundant supply of silver in the world's market is the outlook for the future, inasmuch as a comparatively small per capita increase in the use of silver by such vast numbers would not only rapidly absorb any existing surplus, but possibly augment demand in excess of any current supply."

These arguments would seem to refute the theory of the opponents of free silver coinage, so far as the "dumping ground" argument is concerned.

Upon the adoption of free coinage of both metals in the United States, it is certain that, in this country, the price of silver would rise, or the value of gold would fall, until the commercial ratio of the two metals was coincident with the statutory ratio, subject only to the slight difference due to minting charges, if any; but the gold price of silver can not rise in New York, without an immediate corresponding rise in London and every other commercial center. The gold price of silver would be everywhere substantially the same, and gold would

not go elsewhere as a result of the high price here, unless an ounce of gold could buy more silver elsewhere than in the United States. This last contingency needs to be examined in the light of past and present conditions.

While some countries have free coinage of silver, and some have free coinage of gold, there is at this time no country in the world where private depositors may have free coinage of both at a fixed ratio.

In the early part of this paper, it has been stated that a difference between the ratios adopted in America and Europe, caused reciprocal movements of gold and silver, gold going to the place where it would buy the most silver and silver going where it would buy the most gold. This fact was then possible by reason of free coinage of both metals in different countries *under different ratios.*

We should now have no such difficulty. If, for example, our free coinage ratio should be 16 ounces of silver to 1 ounce of gold, there is no nation in the world that, through minting laws or otherwise, is offering to give more than 16 ounces of silver for 1 ounce of gold. The United States, to sustain its ratio and keep the metals at the established parity, would have to meet only such commodity rate for silver as might be commercially established in other countries. But that commodity rate would stand at the price fixed by our ratio unless, and except when, an excess of silver in foreign countries locally and temporarily forced that price down.

There is, however, no evidence that the foreign demand for silver will grow less. The necessities

for its use will not be diminished by the fact that, all the world over, it will buy more gold than before.

As suggested by Mr. David A. Wells, in the quotation already made from him, the probability is that the increasing demand for silver in the purely silver-using countries will outstrip the product.

Again, character of the trade relations of the United States with gold-using and silver-using countries, respectively, is such as to *assist* in maintaining the parity of the metals.

In the year ending June 30, 1892, our exports to certain gold-using countries, to wit: Great Britain, Germany, France, Belgium and The Netherlands exceeded our imports from the same countries by the enormous sum of $467,700,000, a balance which they had to pay to us in some form. Our imports from the silver-using countries, China, Japan, India and Mexico, exceeded our exports to those countries by the sum of $70,000,000, a balance to be paid to them by us in some form.

The bulk of our European trade is with England, and in the ten years, 1883 to 1892, the balance was every year in our favor and aggregated 2,360 millions of excess of exports over imports, while, during the same ten years, our imports from the silver-using countries above named exceeded our exports to them 471 millions of dollars.

We are certainly justified in believing that bimetallism at any ratio that is likely to be adopted can be maintained in the United States without driving either metal out of circulation.

The Ratio of 16 to 1 Should not at Present be Changed.

If the United States adopts free coinage of both metals, it is reasonable to believe that the efforts, so long and so frequently made, for an international agreed ratio, will be renewed and be successful. Certainly, until that end is reached, or its permanent abandonment becomes necessary, no change should be made in the American ratio.

To change the ratio would mean the recoinage of all our gold coins, or of all our silver dollars, and during the process of taking up the old coins and getting the new coins into circulation great confusion and trouble would ensue.

If a ratio of 20 to 1 should be adopted, and the change were accomplished, as all of our changes of ratio in the past have been, by reducing the weight or fineness of our gold coins, then the smaller gold coins would be annoyingly small or their fineness diminished, and until they disappeared from circulation the old gold coins would have to pass at a premium or by weight. If the change should be made by increasing the size of the silver dollar, then the argument of inconvenience, derived from weight and size, would be greatly magnified, and the difficulties of reaching an agreement with other nations upon an international ratio would be greatly increased.

There is no necessity of a change of ratio, for the ratio of 16 to 1 can be as easily maintained for the reasons already urged as can any other ratio.

The relative supply of the two metals in the existing stock is more favorable to the maintenance

of this or a higher ratio than it was in 1872 and before, when a ratio of 15½ to 1 was easily maintained in Europe.

When we consider the foregoing facts in the light of the financial troubles of the day, the following deductions seem to be well justified:

1. The free coinage of silver is not a new thing, but was the accepted policy of the United States and of most of the commercial world prior to the year 1873.

2. So long as free coinage of silver continued, variations in the price of silver, as measured in gold, were slight, notwithstanding enormous fluctuations in the annual production of the two metals, and the variations of price which did occur during that period are well explained by the fact of different ratios existing in different free coinage countries.

3. The great decline in the value of silver, as compared with gold, which has marked the last twenty years, is not explained by excessive production of silver, because during that period the world's stock of gold has increased in greater ratio than its stock of silver.

4. That disparity of production is not the cause of recent fluctuations in relative value is further apparent from the fact that a difference of 1,441 millions of dollars in the production of the metals in the twenty years from 1853 to 1872, inclusive, caused a maximum fluctuation in the gold price of silver of less than four cents per ounce, while in the last twenty years there has been a fluctuation of more than 42 cents per ounce in the

gold price of silver with a disparity of production amounting to only 190 millions of dollars.

5. If it be said that the declining price of silver as measured in gold is caused by a diminished *demand* for silver, it is answered that the extent of this demand is determined by coinage laws, as the monetary uses of the metals absorb so large a part of the product as to determine its value.

6. The sole cause for the decline in the gold price of silver is found in the laws which have restricted its coinage, and, in some countries, its power as "legal tender."

7. International bimetallism with free coinage at an agreed ratio would make the relative value of silver and gold steady and permanent whatever temporary fluctuations of production might occur.

8. International agreement having failed, the United States must now act alone, and must either resort to the single gold standard or to the free coinage of silver. Silver purchase acts as a substitute for free coinage of silver cannot be permanent, at least while free coinage of gold continues.

9. To adopt the single gold standard would vastly increase the demand for gold, thereby greatly lessening the prices of all other products and all services, which would further restrict industry and commerce and reduce all values, make the burden of the debtor unbearable, and cause bankruptcies beyond measure.

10. To adopt free coinage of silver at a just ratio would certainly bring immediate relief, as it would diminish the demand for gold and cause prices of all other products to advance, which is a stimulant to enterprise and industrial activity.

11. No ratio lower than 16 to 1 would be a just ratio, because the silver supply of to-day forms no larger proportion of the world's stock of the two metals than it did in 1872, when that ratio was easily maintained.

12. Even if it should prove true that the adoption of independent free coinage by the United States would have the effect to expel our gold and leave silver as practically our only metal money, yet the disasters, if any, resulting therefrom would affect fewer persons and be less intense than those that would result from the adoption of the single gold standard.

13. Under independent free coinage by the United States, silver and gold would both remain in circulation and neither would expel the other.

(1) Because the rise in price, effected by the ratio so established, would affect all the world alike, and there would be little, if any, more inducement to send silver to the United States than to other countries in which its use is required.

(2) Because such rise in gold value of silver would not diminish the demand for or the use of silver in silver-using countries, such as India, China, Mexico and the Straits Settlements.

(3) Because the great mass of subsidiary silver coinage of Europe circulates (and is needed for circulation) at a value in excess of the American ratio, and, therefore, would not be sent to the United States.

(4) Because, as shown by the relative supply of gold and silver, the silver product advances no more rapidly than the demands for silver for monetary use advance.

(5) Because the pressure of the demand for gold would be diminished in European countries, and the necessity of exportation of gold from the United States thereby lessened.

(6) Because it is a well known historical fact that France did not suffer exportation of either metal prior to 1873 to such extent as to disturb the parity between gold and silver, notwithstanding that it had free coinage of both metals and England was on a gold basis, and although London was then, as now, the center of commercial exchanges.

(7) Because the United States, by reason of its greater population and its extent of internal commerce, has greater uses for money than France, and yet, at this time its aggregate amount of coin is much less than that of France, and it has less than $20 of coin per *capita*, while France has more than $41 of coin per *capita*.

(8) Because in our trade relations with foreign countries, gold-using countries buy from us more than they sell to us, while silver-using countries sell to us more than they buy from us, so that on international commerce we receive balances from gold-using countries and pay balances to silver-using countries. This would tend to increase our supply of gold and to diminish our supply of silver.

Both the great parties of the United States have, in various national platforms, professed to favor bimetallism. They have never declared in favor of a single gold standard. The last National Democratic platform declared: "We hold to the

use of both gold and silver as the *standard* money of the country, and to the coinage of both gold and silver, without discrimination against *either metal* or charge for mintage." The last Republican National platform declared: "The American people, from tradition and interest, favor *bimetallism.*" The Congress of the United States, in the Act of July 14, 1890, solemnly declared it to be "the established policy of the United States to maintain the two *metals* on a parity with each other, upon the present legal ratio, or such ratio as may be provided by law."

Bimetallism has been tersely defined in this way: "Bimetallism implies that, both as regards coinage and legal tender, gold and silver are on precisely the same footing. It is not the mere use of both metals for currency, but the use of both as *standard* money which constitutes the essence of bimetallism." (Nicholson's *Money and Monetary Problems*, p. 105.)

The only way to give effect to the declarations of both the great parties of the country, and to show to the world the sincerity of the statutory declaration of 1890, is to give to silver the same right of free coinage that now exists for gold, at a ratio between the *metals*, which shall be provided by law. This policy, as declared in the Sherman Act, was not limited to the keeping of metallic *dollars* at par. It included that and went farther. The policy related to the maintenance of the parity of the two *metals*. This can only be done through free coinage laws.

The gravity of the present crisis demands that the policy so clearly and emphatically declared by

the people in convention, and by their representatives in Congress, should be made effective by the prompt adoption of a law providing for the free coinage of silver.

JOEL F. VAILE.

DENVER, COLO., August 7, 1893.

APPENDIX.

NOTES ON GOLD AND SILVER.

Note 1.—World's Production, 1493–1872.

(a)	Dollars. Millions Gold.	Dollars Millions Silver.
1493–1848	2626	5705
1849–1876	3215	1367
Total to 1876, inclusive	5841	7072
1873–1876 (See Note 2)	388	321
Total, 1493 to 1872, inclusive	5453	6751

(a) *Report of Monetary Commission U. S. (1877), p. 78.*

Note 2.—World's Production, 1873–1892.

(a)	Gold	Silver (coin value).
1873	$ 96,200.000	$ 81,800,000
1874	90,750.000	71.500,000
1875	97,500.000	80,500.000
1876	103,700,000	87,600.000
1877	114,000,000	81,000.000
1878	119,000,000	95,000 000
1879	109,000.000	96,000.000
1880	106,500.000	96.700,000
1881	103.000,000	102.000,000
1882	102.000,000	111,800,000
1883	95,400,000	115,300,000
1884	101,700,000	105,500 000
1885	108,400,000	118,500.000
1886	106.000,000	120,600,000
1887	105.775.000	124,281,000
1888	110,197,000	140,706,000
1889	123 489,000	162.159,000
1890	113.149,600	172,234,500
1891	120,518,800	186,733.000
1892	130,816.600	196,605,200

(a) *Report of Director U. S. Mint, 1892.*

NOTE 3.—INCREASE SINCE 1872 AND PRESENT RELATIVE SUPPLY.

	Millions Gold.	Millions Silver.
Supply in 1873 (product 1493–1872)	5453	6751
Increase in 1893 (product 1873–1892)	2157	2347
Total (product 1493–1892)	7610	9098
Proportions of combined stock in 1873 (product 1493–1872)	44.68 per cent.	55.32 per cent.
Proportions of combined stock in 1893 (product 1493–1892)	45.55 per cent.	54.45 per cent.
Ratio of increase since 1872	39.55 per cent.	34.77 per cent.

Soetbeer's tables* show larger product of both metals from 1493–1872 than are here used. Using Soetbeer's tables for production 1493–1875, and tables of Director of U. S. Mint from 1873–1892, results will be as follows: (Amounts in millions of dollars; silver computed at $1.29.)

	Gold.	*Silver.*
Product 1493–1875	6632.1	8136.8
" 1873–1875	274.4	233.8
Product 1493–1872	6357.7	7903.
Relative supply, 1873	44.58 per ct.	55.42 per cent.
Product 1873–1892	2157.	2347.
Product 1493–1892	8514.7	10250.
Relative supply, 1893	45.37 per ct.	54.63 per cent.
Increase of aggregate product (1493–1872) in succeeding twenty years	33.93 per ct.	29.57 per cent.

* These amounts are computed from Soetbeer's tables as the same are given in Prof. Laughlin's "History of Bimetallism in the United States."

NOTE 4.—COMPARISON OF PRODUCT AND PRICES.

Product.	Millions.
Gold product, 1853 to 1872 (20 years	$2383.9
Silver " " " "	942.1
Gold excess for twenty years prior to Demonetization Act	$1441.8
Silver product, 1873 to 1893 (20 years)	$2347.
Gold " " " "	2157.
Silver excess for twenty years after Demonetization Act	$190.

GOLD PRICES OF SILVER PER OUNCE.

1853–1872, maximum (1859)	$1.36
" " minimum (1872)	1.32 2-10
Greatest variance (20 years)	.03 8-10
1873–1892, maximum (1873)	$1.29 8-10
" " minimum (1892)	.87 5-10
Greatest variance	.42 3-10

NOTE 5.—RELATION OF WORLD'S TOTAL GOLD COINAGE TO WORLD'S TOTAL GOLD PRODUCT FOR SIX SUCCESSIVE YEARS.

	Product.	Coinage.	Excess of Product.	Excess of Coinage.
1884	$101,700,000	$99,432,795	$ 2,267,205	
1885	108,400,000	95,757,582	12,642,418	
1886	106,000,000	94,642,070	11,357,930	
1887	105,775,000	124,992,465	------------	$19,217,465
1888	110,197,000	134,827,740	------------	24,630,740
1889	123,489,000	168,901,519	------------	45,412,519

The significance of this table is found in the INCREASE of coinage as compared with product in recent years.